

New species of the Tipulid genus *Rhypholophus*, with a Table for Determining the North American species.

R. W. DOANE, Stanford University.

1. Discal cell closed, or coalescing with the second posterior cell . . . 2.
Discal cell open, coalescing with the third posterior cell 11.
2. Wings variegated with gray or brown markings. 3.
Wings uniformly colored 5.
3. Sixth and seventh longitudinal veins divergent, wings spotted with
brown in all the cells **innocens** O. S.
Sixth and seventh longitudinal veins parallel or converging toward
the tip 4.
4. A narrow, indefinite, sometimes almost obsolete brown band running
from the stigma across the central cross-veins.
fascipennis Zett.
Three more or less definite brownish or grayish bands across the
apical portion and three spots in the basal portion of the wing.
nubilus O. S.
5. Seventh vein arcuated in such a way that the axillary cell is as wide
or wider in the middle than at the tip 6.
Sixth and seventh veins divergent at the tip 8.
6. Discal cell open, coalescing with the second posterior cell.
holotrichus O. S.
* Discal cell closed 7.
7. Antennæ altogether brownish **arcuatus** n. sp.
First and second segments of the antennæ yellow . . **fumatus** Doane.
8. Antennæ altogether brownish **divexus** n. sp.
Antennæ yellow at the base 9.
9. Discal cell open, coalescing with the second posterior cell.
flaveolus Coq.
Discal cell closed 10.
10. First four segments of antennæ yellow **nigripilis** O. S.
First two segments of antennæ yellow **fusifformis** Doane.
11. Thorax reddish, with a distinct black line in the middle.
rubellus O. S.
Thorax brownish or yellowish 12.
12. Wings with a conspicuous stigmatal spot 13.
Stigmatal spot not conspicuous 15.
13. First two segments of antennæ yellowish **lanuginosus** Doane.
Antennæ wholly brownish 14.
14. Claw at the tip of the lobes of the hypopygium simple, with a single
straight branch at the base **meigenii** O. S.
Claw at the tip of the lobes of the hypopygium complex, base very
broad and emitting three short curved branches. **cornutus** n. s.

15. Thorax light yellow 16.
 Thorax brownish or brownish-yellow 17.
 16. Antennæ and palpi, except basal joint, brown *cockerelli* Coq.
 Antennæ wholly yellow *parallelus* n. sp.
 17. Antennæ of male long, reaching beyond the root of the wings . . 18.
 Antenna of male not reaching beyond root of wings. *manicatus* Doane.
 18. Antennæ of male longer than the whole body *longicornus* n. sp.
 Antennæ not longer than the whole body 19.
 19. Thorax with three brown stripes *affinis* Lund.
 Thorax without stripes *monticola* O. S.

***Rhypholophus arcuatus* n. sp.**

Brown; head grayish brown, front darker; rostrum, palpi and antennae brown, the latter somewhat lighter toward the base; thorax brown with a grayish bloom, with rather long yellow hairs; scutellum and metanotum hoary; halteres pale, knobs slightly darker; legs light brown, tarsi darker; abdomen brown with rather dense light yellow hair; ovipositor long, ferrugineous, upper valves strongly arcuated; wings brown, pubescence rather dense of medium length; stigma slightly darker; veins darker brown; auxiliary cross vein about half way between the origin of the prae-furca and the tip of the auxiliary vein; discal cell closed, seventh vein arcuated in such a way that the axillary cell is broader in the middle than at the tip. Length 6 mm., wing 8 mm.

Hab.—Ithaca, N. Y. Two females.

***Rhypholophus divexus* n. sp.**

Brown; palpi and first joint of antennae dark brown, other segments of antennae very light brown; thorax wholly light yellowish-brown; legs brown; femora, except at the base, much darker; abdomen brown; with dense rather long brownish-yellow hairs; ovipositor ferrugineous, upper valves strongly arcuated; wings brown; stigma darker brown, distinct; pubescence rather long and dense; discal cell opening into the second posterior cell; sixth and seventh veins diverging. Length 4 mm., wing 6 mm.

Hab.—Keyport, Wash. One female.

***Rhypholophus longicornus* n. sp.**

Brown; palpi and antennae brown, elongate the latter in the male as long as the whole body; joints of the flagellum somewhat fusiform with a dense whirl of long fine light-brown hairs; thorax brownish yellow, slightly darker above; halteres yellowish brown, tips of knobs darker brown; legs light brown; abdomen brown with rather dense long light-yellowish hairs; hypopygium yellow, lobes somewhat elongate, claws reddish-brown darker at the tips; ovipositor ferrugineous, long, slender, upper valves conspicuously arcuated; wings rather broad,

brown, stigma and the costal cell somewhat darker; pubescence long and dense over the whole wing; discal cell opening into the third posterior cell; distal portion of the sixth and seventh veins subparallel. Length 4 mm., wing 6 mm.

Hab.—Keyport, Wash. Two males, two females.

Rhypholophus parallelus n. sp.

Yellow; front and palpi somewhat darker; antennae wholly yellow; thorax reddish yellow, slightly darker above; halteres pale yellow; knobs slightly infuscated at the tip; legs yellowish; abdomen brownish above, yellow below; ovipositor reddish-yellow, upper valves somewhat arcuated; wings brown, rather narrow; stigma indistinct; discal cell opening into the third posterior cell; distal portion of the sixth and seventh veins subparallel, the latter slightly arcuated; pubescence on the wings rather long and dense. Length 5 mm., wing 6 mm.

Hab.—Ithaca, N. Y. Two females.

Rhypholophus cornutus n. sp.

Yellowish-brown; rostrum and palpi darker brown; antennae light brown, joints of the flagellum of the male with a dense soft pubescence and long verticles, those of the female with the pubescence less dense; thorax yellowish-brown with sparse reddish-yellow hairs; halteres yellowish; legs brownish, femora lighter toward the base; abdomen brown, with long sparse yellow hairs; hypopygium reddish-brown, horny appendages black, those at the tip of the lobes very broad and emitting three short curved branches; ovipositor reddish-yellow, upper valves slightly arcuated; wings brown; stigma darker brown; pubescence on wings not very long or dense; discal cell opening into the third posterior cell; distal portions of the sixth and seventh veins subparallel. Length 5 mm., wing 6 mm.

Hab.—Stanford University, Cal. Two males, one female.

EVELYN GROESBEECK MITCHELL has brought suit against Dr. Harrison G. Dyar to recover \$35,000 damages on account of a review of her book on mosquitoes which he published in the Canadian Entomologist.

NOTE ON *Perilitus americanus* RILEY.—At Paris, Texas, adults of *Megilla maculata* DeGeer were quite commonly found during the second week in July, 1904, and later, adhering to the cocoons of this species, its parasite, in corn fields. Many of these cocoons were brought into the laboratory and the resulting parasites proved to be all females, which varied considerably in size. The cocoons of the parasite were still numerous in August at Paris and were also found at Will's Point, Texas, on August 15th. The pupal instar was recorded in two cases, beginning with the formation of the cocoon: July 16-22, 5½ days, and July 18-23, 5 days.—A. A. GIRAULT, Paris, Texas.